

CLAIMS

We claim:

1. A method for sanitation of produce using at least one bacteriophage, comprising:
5 providing the at least one bacteriophage; and
applying the at least one bacteriophage to the produce;
wherein the produce is selected from the group consisting of fruits, vegetables, and combinations thereof.
- 10 2. The method of claim 1, wherein the produce comprises at least one of freshly-cut produce, damaged produce, diseased produce, and contaminated produce.
- 15 3. The method of claim 1, wherein the step of applying the at least one bacteriophage to the produce comprises:
spraying the at least one bacteriophage on the produce.
- 20 4. The method of claim 1, wherein the step of applying the at least one bacteriophage to the produce comprises:
misting the at least one bacteriophage on the produce.
- 25 5. The method of claim 1, wherein the step of applying the at least one bacteriophage to the produce comprises:
washing the produce in the at least one bacteriophage.
- 30 6. The method of claim 1, wherein the step of applying the at least one bacteriophage to the produce comprises:
immersing the produce in a solution containing the at least one bacteriophage.
7. The method of claim 1, wherein the step of applying the at least one bacteriophage to the produce comprises:

periodically applying the at least one bacteriophage to the produce.

8. The method of claim 1, wherein the step of applying the at least one bacteriophage to the produce comprises:

5 continuously applying the at least one bacteriophage to the produce.

9. The method of claim 1, further comprising the step of:
applying at least one chemical sanitizer to the produce.

10 10. The method of claim 9, wherein the steps of applying the at least one bacteriophage to the produce and applying at least one chemical sanitizer to the produce are performed substantially simultaneously.

11. The method of claim 1, wherein the step of applying the at least one
15 bacteriophage to the produce comprises:

applying the at least one bacteriophage to the produce in an effective amount to reduce the colonization of pathogenic bacteria susceptible to the bacteriophage by at least one log.

20 12. The method of claim 1, wherein the at least one bacteriophage comprises a bacteriophage cocktail.

13. The method of claim 12, wherein the bacteriophage is targeted
25 against at least one food-borne pathogen.

14. The method of claim 13, wherein the at least one food-borne pathogen comprises at least one of *Salmonella*, shiga toxin-producing *E. Coli*, and *L. monocytogenes*.

30 15. The method of claim 1, wherein the at least one bacteriophage comprises at least one pH-resistant phage mutant.

16. The method of claim 1, further comprising the step of:
applying bacteriocin nisin to the produce.